PROCESS FOR PREPARING HYDRO-DESULFURIZATION CATALYST

ABSTRACT

A process for the preparation of hydrotreating catalyst which comprises of a Group VIB metal and Group VIII metal on an active composite carrier for the removal of sulfur from gas oil feed stocks, wherein the said carrier comprises of a phosphated alumina and an ultra stable Y zeolite and the metal components mostly reside on the alumina, said process comprising the steps of impregnation of chelated metal complex preferentially on to the alumina component of the composite support and subjecting the composite catalyst to a high-speed ball milling. The catalyst obtained by the process of the present invention consists of the active metals in the nanoparticle range (less than 50Å) while also retaining the zeolite properties of the composite carrier and the catalyst produces less than 50 ppm sulfur from gas oil feed stocks containing greater than 1wt% sulfur under typical commercial operating conditions.